

Work Order ID 81599

81599

Page 1

March-16-12 8:35:16 AM

Item ID: D3315-2

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Wearplate

Start Date: 15/03/2012 Start Qty: 6.00

6

Cust Item ID:

Required Date: 29/03/2012 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: MJS

Date: 12/03/16

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3315	Rev B

100	FLOW WATER JET	0.00
-----	----------------	------

100

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D Dwg Rev: B Prog Rev: B 2-Deburr
if necessary

1010 063

110	QC2- Inspect parts off machine FAI/FAIB	0.00
-----	---	------

110

QC

Memo

0.00

Quality Control

120	QC8- Inspect parts - second check	0.00
-----	-----------------------------------	------

120

QC

Memo

0.00

Quality Control

6 0 Jm 12-6-24

6 0 Jm 12-6-24

6 0 Jm 12-6-25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 81599

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Page 2

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Start Date: 15/03/2012 Start Qty: 6.00

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Required Date: 29/03/2012 Req'd Qty: 6.00

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Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

130

Small Fab

Small Fab

Memo

0.00

0.00

Small Fab

Deburr if necessary

140

140

Brake NC

NC BRAKE

Memo

0.00

0.00

Brake NC

1- Form using DT8751 Die as per Dwg D3315Rev: B 2- Form using
DT8179 Die and form joggle using DT8157 as per Dwg D3315Rev: B

150

150

QC

Quality Control

QC6- Inspect dimensions to drawing

Memo

0.00

0.00

87260430

2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Work Order ID 81599

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Page 3

March-16-12 8:35:16 AM

Item ID: D3315-2 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Wearplate
 Start Date: 15/03/2012 Start Qty: 6.00 ***6*** Cust Item ID:
 Required Date: 29/03/2012 Req'd Qty: 6.00 ***6*** Customer:
 Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Large Fab	0.00							
160									
Large Fab	Memo	0.00							
Large Fab	Weld hard surface using D3315-2T3 as per QSI 004 and Dwg D3315 Rev:								
	B Qty Part Number Description Batch A/R								
	N/A 7560 Hardcoat Rod m122359								
170	QC10- Inspect visual per QSI004- ground welds	0.00							
170									
QC	Memo	0.00							
Quality Control									
180	QC5- Inspect part completeness to step on W/O	0.00							
180									
QC	Memo	0.00							
Quality Control									

(x6) m-l 12-08-20

DAS 16 2-09 12/08/14

DAS 16 2-09 12/08/21

(x6)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

Work Order ID 81599

81599

Page 4

March-16-12 8:35:16 AM

Item ID: D3315-2 Accept ***N9000040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Wearplate
 Start Date: 15/03/2012 Start Qty: 6.00 ***6*** Cust Item ID:
 Required Date: 29/03/2012 Req'd Qty: 6.00 ***6*** Customer:
 Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3	0.00							
190									
Powdercoat	Memo	0.00							
Powder Coating	START TIME: 2:30	OVEN TEMPERATURE:							
	FINISH TIME: 3:00								
W121279									
200	QC3- Inspect Part Finish	0.00							
200									
QC	Memo	0.00							
Quality Control									
210	Packaging	0.00							
210									
Packaging	Memo	0.00							
Packaging	Identify on inside surface using a permanent fine point marker with the following:TCCA-PDA, Dart Aerospace Ltd.P/N: D3315-2, B/N: BXXXXXFor Product Eligibility see PDA04-17and StockLocation: 500								

6X ✓ MZ 12/08/21

6 φ BLB 8-21

6x SP 12-8-22

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Work Order ID 81599***81599***

Page 5

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Required Date: 29/03/2012 Req'd Qty: 6.00 ***6*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220	QC21- Final Inspection - Work Order Release	0.00							
220									
QC	Memo	0.00							
Quality Control									

MLJ 12/08/23
ME 12-08-23

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

Picklist Print

March-16-12 8:35:20 AM

Page 1

Work Order ID: 81599

81599

Parent Item: D3315-2

D3315-2

Parent Item Name: Wearplate

Start Date: 15/03/2012

Required Date: 29/03/2012

Start Qty: 6.00

Required Qty: 6.00

Comments:

IPP: A05.05.12New issueKJ/JLM
IPP Rev:B As per Rev B 06-03-24 JLM
IPP RevC now water jet 07-12-06 DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M1010S16GA

Purchased

No

100

sf

69.0000

1.695

10.17

M1010S16GA

**

1010/1025 sheet 16GA

Jun 12-6-24

Location

Loc Qty

Loc Code

MAT019

69

116791

21.4

117500

17.6

118965

30

118965

121195

121195

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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DART AEROSPACE LTD		Work Order:	81599
Description: Wearplate		Part Number:	D3315-2
Inspection Dwg: D3315	Rev: B	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒

First Article

☐

Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.266 x 0.450	+0.006/-0.001 x +/-0.010	0.270 x 0.454	✓		✓	mmol
4.402	+/-0.010	4.397"	✓		✓	"
4.137	+/-0.010	4.137"	✓		✓	"
3.550	+/-0.010	3.558"	✓		✓	"
5.464	+/-0.010	5.463"	✓		✓	"
5.214	+/-0.010	5.209"	✓		✓	"
1.224	+/-0.010	1.225"	✓		✓	"
2.57	+/-0.030	2.567"	✓		✓	"
6.273	+/-0.010	6.270"	✓		✓	"
8.224	+/-0.010	8.224"	✓		✓	Prodwrz
9.515	+/-0.010	9.515"	✓		✓	"
11.429	+/-0.010	11.424"	✓		✓	"
15.474	+/-0.010	15.474"	✓		MT	HB01
16.379	+/-0.010	16.379"	✓		MT	"
21.360	+/-0.010	21.360"	✓		MT	"
23.474	+/-0.010	23.474"	✓		MT	"
26.273	+/-0.010	26.273"	✓		MT	"
29.42	+/-0.030	29.42"	✓		MT	"
0.060	+/-0.010	0.058"	✓		✓	mmol
Ø0.300	+0.006/-0.001	0.306"	✓		✓	"

Measured by:	JM
Date:	12-6-24

Audited by:	MTW
Date:	12-06-25

Prototype Approval:	N/A
Date:	N/A

Rev	Date	Change	Revised by	Approved
A	09.09.28	New Issue	KJ	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

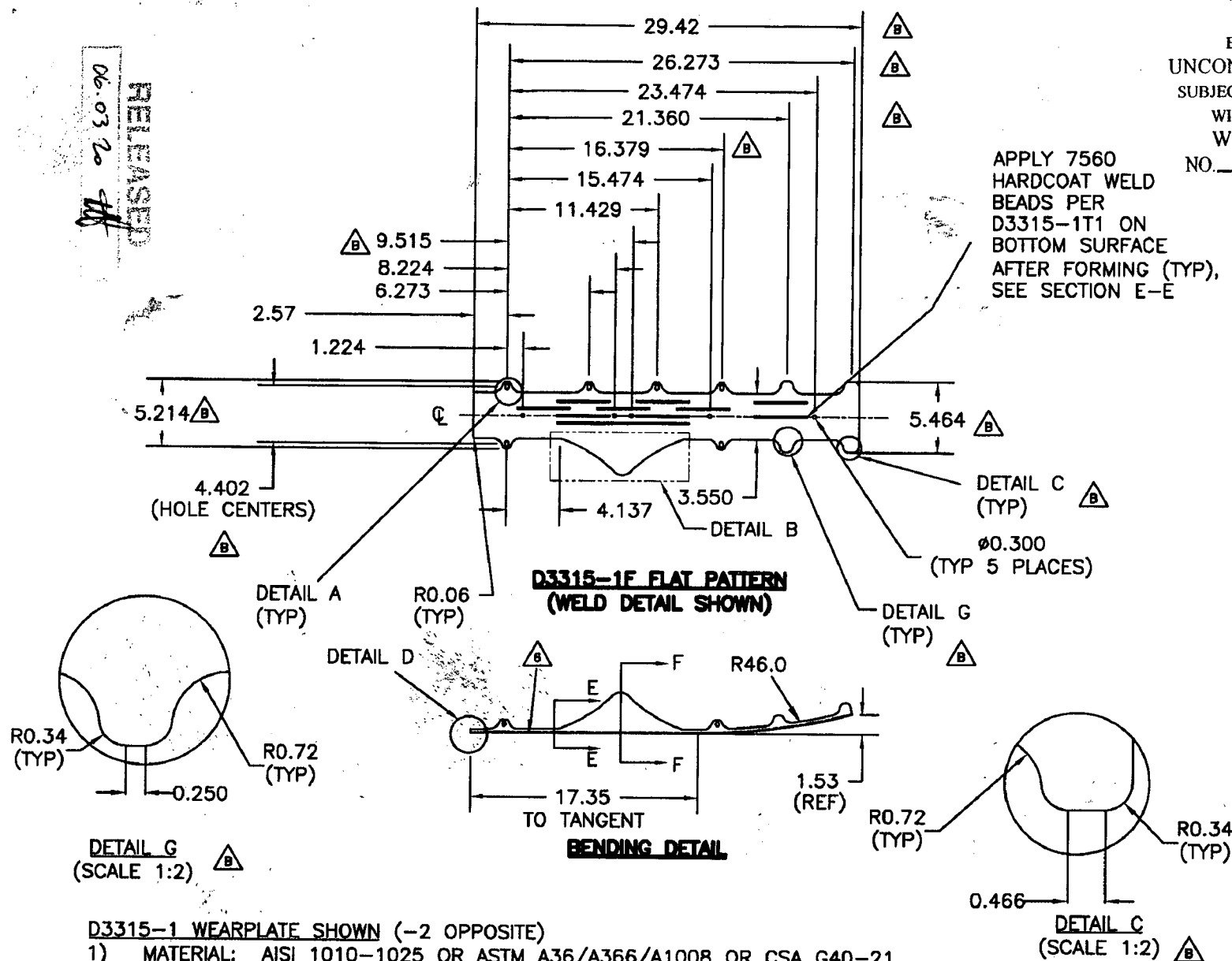
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

RELEASED
06.03.20



D3315-1 WEARPLATE SHOWN (-2 OPPOSITE)

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 16 GAUGE (0.060 THICK)
 - 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
 - 3) WELD PER DART QSI 004
 - 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 5) ALL DIMENSIONS ARE IN INCHES
 - 6) IDENTIFY ON INSIDE SURFACE AS INDICATED
- TCCA-PDA, DART AEROSPACE LTD., P/N D3315-X
B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-17"

SHOP COPY
RETURN TO
ENGINEERING

UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. 01599 MLO
12/03/16

DART

DESIGN		UNKNOWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
04		04		
CHECKED	APPROVED	DRAWING NO.		REV. B
04	04	D3315		SHEET 1 OF 4
DATE	TITLE		SCALE	
06.01.31	WEARPLATE		1:12	
A	04.09.10	NEW ISSUE		
B	06.01.31	UPDATE DIMENSIONS		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

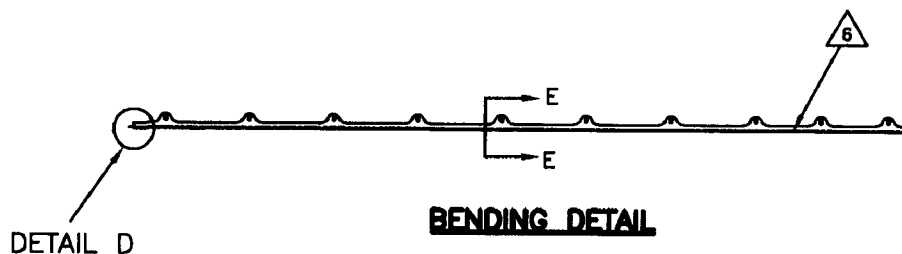
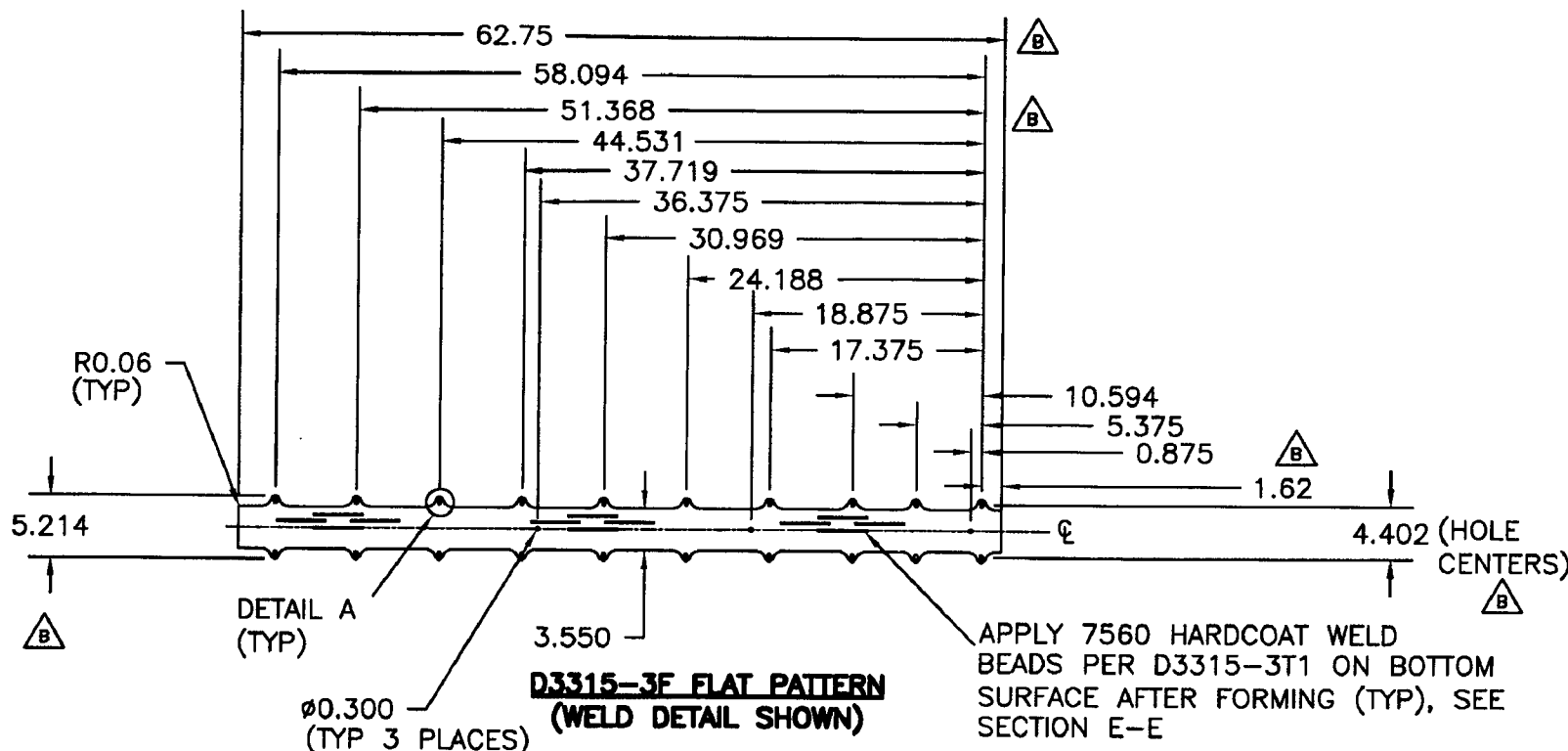
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

81599

DART

DESIGN	PH	DRAWN BY	PH	DART AEROSPACE LTD
CHECKED	<i>[Signature]</i>	APPROVED	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA
DATE	06.01.31	DRAWING NO.	D3315	REV. B
		TITLE	WEARPLATE	SHEET 2 OF 4
		SCALE	1:16	



D3315-3 WEARPLATE SHOWN (-4 OPPOSITE)

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 16 GAUGE (0.060 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) WELD PER DART QSI 004
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) IDENTIFY ON INSIDE SURFACE AS INDICATED

"TCCA-PDA, DART AEROSPACE LTD., P/N D3315-X
B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-17"

RELEASED
26 03 20 *[Signature]*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

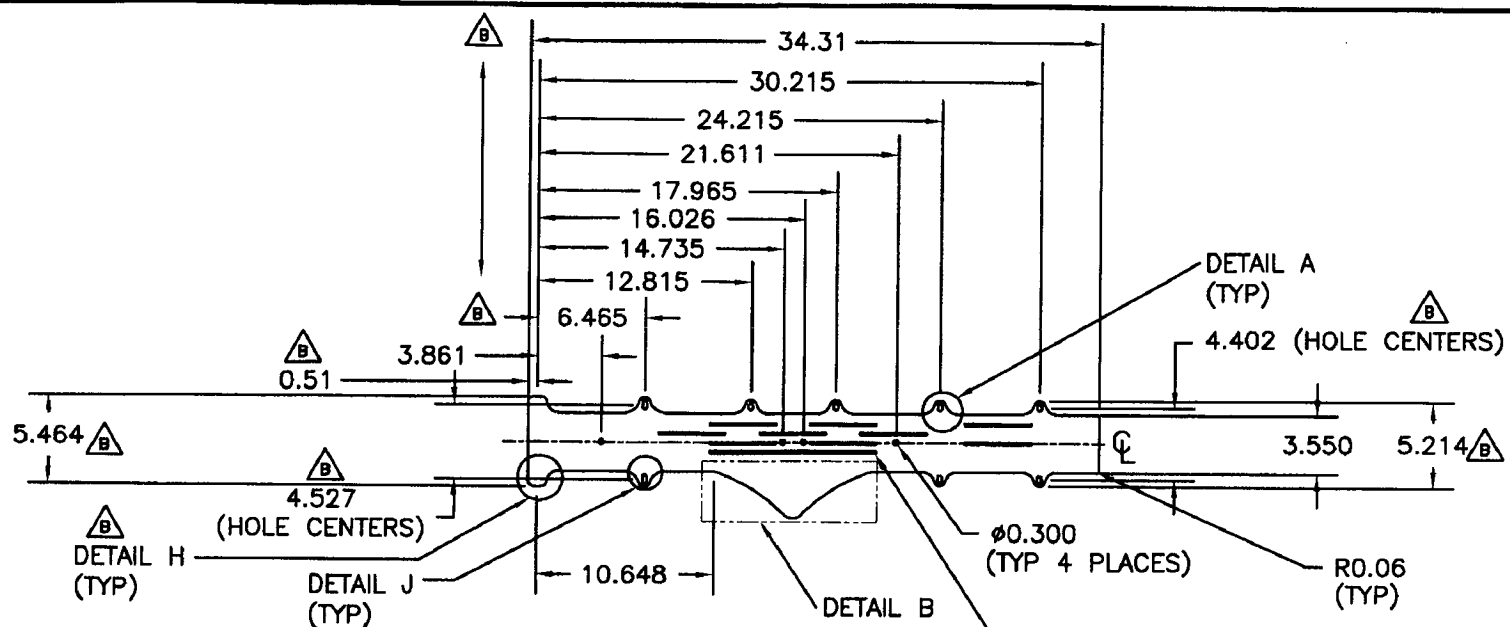
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

81595

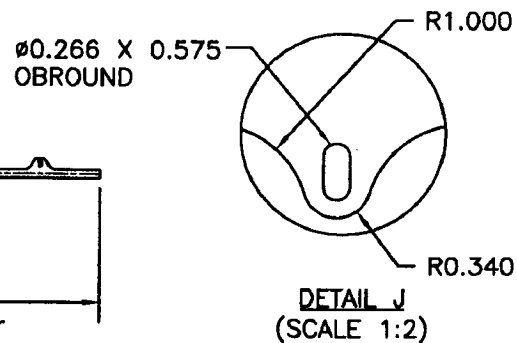
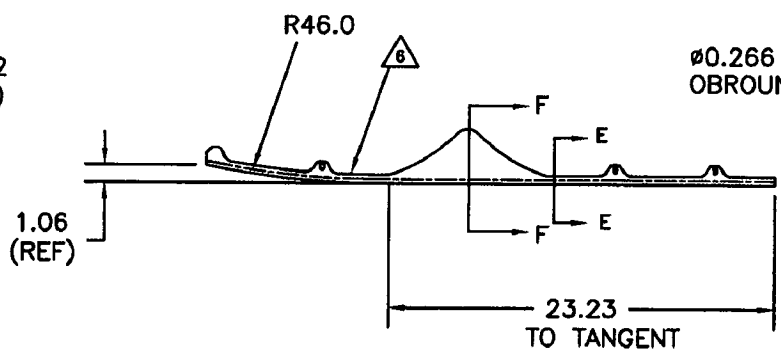
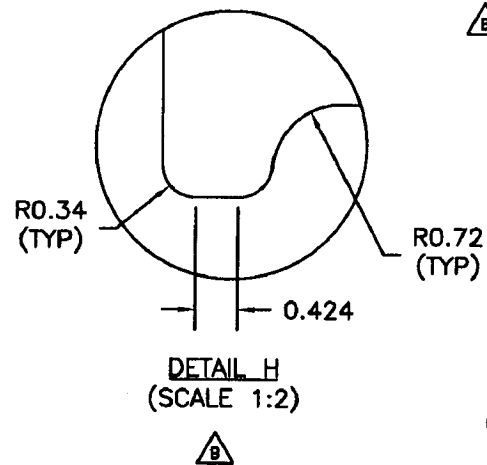


DESIGN	814	DRAWN BY	814	DART AEROSPACE LTD
CHECKED		APPROVED		HAWKESBURY, ONTARIO, CANADA
DATE	06.01.31	DRAWING NO.	D3315	REV. B
		TITLE	WEARPLATE	SHEET 3 OF 4
		SCALE	1:12	



**D3315-5F FLAT PATTERN
(WELD DETAIL SHOWN)**

APPLY 7560 HARDCOAT WELD
BEADS PER D3315-5T1 ON BOTTOM SURFACE
AFTER FORMING (TYP), SEE SECTION E-E



D3315-5 WEARPLATE SHOWN (-6 OPPOSITE)

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 16 GAUGE (0.060 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) WELD PER DART QSI 004
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSION ARE IN INCHES
- 6) IDENTIFY ON INSIDE SURFACE AS INDICATED
"TCCA-PDA, DART AEROSPACE LTD., P/N D3315-X
B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-17"

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06 03 20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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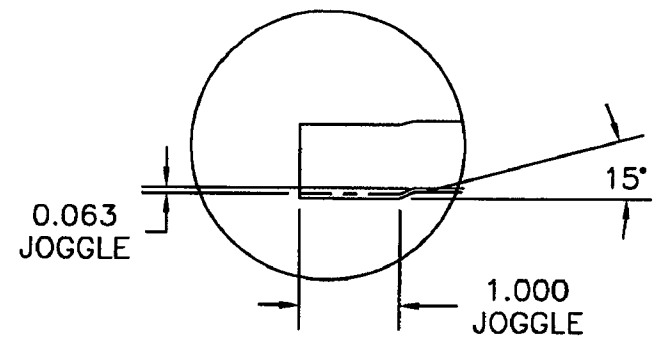
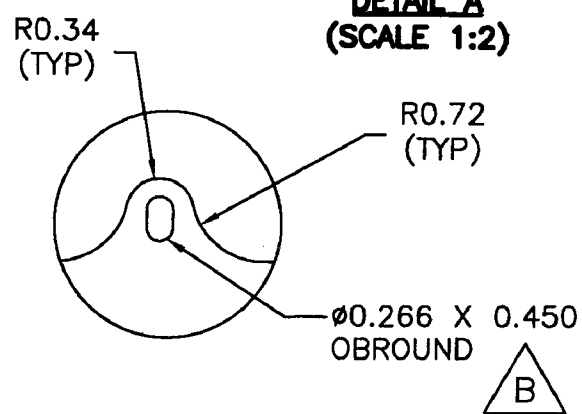
NOTE: Date & initial all entries

01599

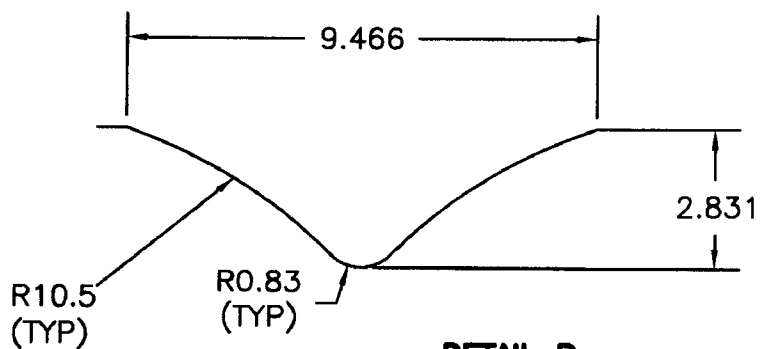


DESIGN	DRAWN BY	DART AEROSPACE LTD
PH	PH	HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO.
		D3315
DATE	TITLE	REV. B
06.01.31	WEARPLATE	SHEET 4 OF 4
		SCALE
		NTS

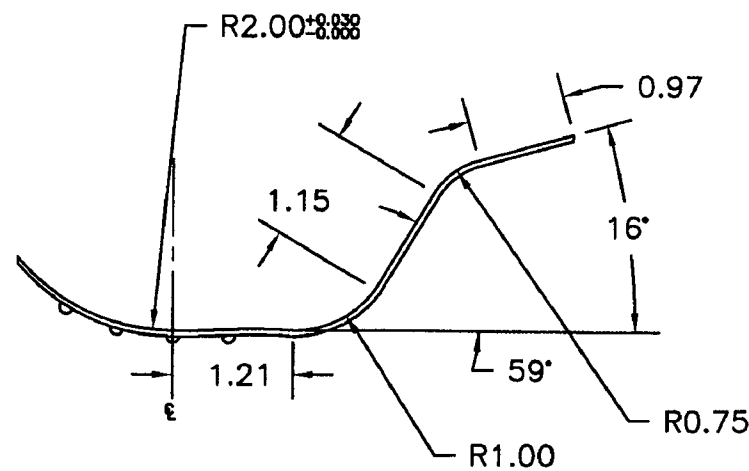
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(SCALE 1:2)



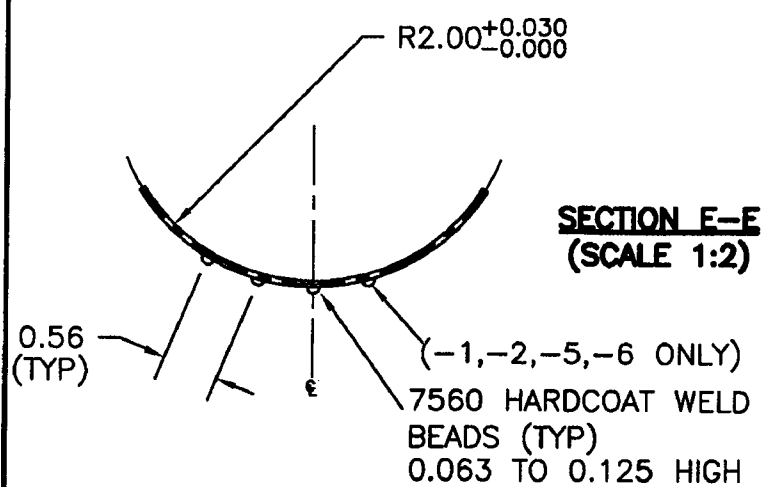
DETAIL D
(SCALE 1:2)



DETAIL B
(SCALE 1:4)



SECTION F-F
(SCALE 1:2)



SECTION E-E
(SCALE 1:2)

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06.03.20

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FIGURE 1: D412-726-111 WEARPLATE.MIT
(205/212/412 STANDARD SKIDTUBE)
(LH SKIDTUBE SHOWN, VIEW LOOKING OUTBOARD)
(RH OPPOSITE)

